STATE OF NEW HAMPSHIRE INTER-DEPARTMENT COMMUNICATION

DATE:

September 3, 2020

FROM:

Andrew O'Sullivan

Wetlands Program Manager

AT (OFFICE):

Department of

Transportation

SUBJECT

Permit-By-Notification (PBN)

Meredith, 42828

Bureau of

Environment

TO

Karl Benedict, Public Works Permitting Officer

New Hampshire Wetlands Bureau 29 Hazen Drive, P.O. Box 95 Concord, NH 03302-0095

Forwarded herewith is the Permit-By-Notification (PBN) application package prepared by Hoyle Tanner Associates and NH DOT Bureau of Bridge Maintenance for the subject minimum impact project. This project qualifies for a PBN per Env-Wt 309.06(a)(19)- repair of an existing legal tier 3 stream crossing that complies with Env-Wt 903.01(e)(3) and is classified as minimum per Env-Wt 903.01(e)(3). The project is located on NH Route 25 in the Town of Meredith, NH. The proposed work consists of repair to bridge 189/150. The proposed repairs include replacement of rip rap in front of both of the south facing wingwalls where previous rip rap existed but has scoured away and now the structure is showing signs of being undermined.

The lead people to contact for this project are Steve Johnson, Administrator, Bureau of Bridge Maintenance (271-3668 or steve.johnson@dot.nh.gov) or Sarah Large, Wetlands Program Analyst, Bureau of Environment (271-3226 or sarah.large@dot.nh.gov).

A payment voucher has been processed for this PBN (Voucher #619481) in the amount of \$400.

If and when this PBN application meets with the approval of the Bureau, please send the notification directly to Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment.

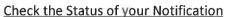
AMO:sel Enclosures

cc: BOE Original Town of Meredith (4 copies via certified mail) Kevin Nyhan, BOE (via electronic notification)



WETLANDS PERMIT-BY-NOTIFICATION (PBN)

Water Division/Land Resources Management Wetlands Bureau





RSA/Rule: RSA 482-A/ Env-Wt 100-900

APPLICANT'S NAME: NH Department of Transportation		TOWN NAME: Meredith	

			File No.:
Administrative	Administrative	Administrative	Check No.:
Use Only	Use Only	Use Only	Amount:
			Initials:

To ensure that your project is eligible for a Permit-by-Notification (PBN) and includes all required information, please review all sections of this application form and the "Permit-by-Notification: Attachment Checklist & Additional Instructions". The <u>project-specific activity checklist</u> that corresponds to the PBN you are applying for may also be used to facilitate submission.

Terms in **bold font** are defined on the attached Definition of Terms page.

SEC	SECTION 1 - GENERAL CRITERIA						
а.	Is the proposed project a minimum impact project which deviates from the standards and conditions specified in Env-Wt 307 or deviates from the applicable provisions of Env-Wt 500, Env-Wt 600, or Env-Wt 900 (Env-Wt 309.06(b))?	Yes No					
b.	Does the project include activities that are prohibited under RSA 482-A (Env-Wt 306.02(a)(2))?	Yes 🛛 No					
c.	Does the project include activities that do not follow or meet the applicable best management practices (Env-Wt 306.02(a)(3))?	Yes No					
d.	Does the proposed project involve work in any jurisdictional area that was commenced prior to obtaining the applicable approval (Env-Wt 306.02(b)) (i.e. after-the-fact work)?	Yes No					
e.	Is the proposed project located in a <u>priority resource area</u> other than a documented occurrence of <u>protected species or habitat</u> (Env-Wt 309.01(b)(3))?	Yes No					
1 1	If you answered "Yes" to any of the above questions, you cannot use this form and must file a <u>Standard Permit Application (NHDES-W-06-012)</u> . If you answered "No" to all of the above questions, proceed to Section 2.						

SECTION 2 - PROJECT SPECIFIC CRITERI	A (Env-Wt 309.06)			
The following project types may be elig					
confirm eligibility, please refer to the p	roject-specific che	cklist that corresponds	s to the PBN project type selected.		
		empt from obtaining a	conservation commission signature in		
order to qualify for expedited revi		C			
‡Pursuant to Env-Wt 309.07(1), thes LAC signature if the project is with			aintenance activities that may require		
expedited review.	iiii EAC jai isaictioi	i as defined in Env-vv	103.27 in order to quality for		
Exotic aquatic weed control	Penair or ren	acement of an	Agricultural activities that comply		
activities not exceeding one acre		wall that complies	with Env-Wt 522.06(a)		
that comply with Env-Wt	with Env-Wt				
<u>510.08(a)</u>					
Replenishment of an existing		or repair of an	A temporary coffer dam that		
legal beach that complies with		boathouse that	complies with Env-Wt 526.06(f)		
Env-Wt 511.07(a) †	_	Env-Wt 515.07(a) †			
Repair or replacement of an existing legal deck or patio that	launch under	acement of a boat	Maintenance of an existing legal tidal docking structure that		
complies with Env-Wt 511.08(a) †	launen ander	LIIV-VVC 510	complies with Env-Wt 606.17(b) †		
Installation of a new seasonal	Installation of	f a dry hydrant that	Repair of an existing legal tier 1 or		
dock that is not eligible for an	Million .	Env-Wt 518.07(a)	tier 2 stream crossing that		
SPN and complies with Env-Wt			complies with Env-Wt		
513.24(a)			903.01(e)(2) †‡		
Repair or replacement of an		ities that are not	Repair of an existing legal tier 3		
existing legal docking structure that complies with Env-Wt	Env-Wt 520.0	SPN and comply with 5(a)	<pre>stream crossing that complies with Env-Wt 903.01(e)(3) †‡</pre>		
513.24(a) †	2117 17 02010	5147	- International Control of the Contr		
Installation of a dock anchoring	Utility activiti	es that are not	Replacement of an existing legal		
pad that complies with Env-Wt		SPN and comply with	tier 1 stream crossing that		
<u>513.24(a)(1)c</u>	Env-Wt 521.0	6(a)	complies with Env-Wt		
			903.01(e)(4) †		
Installation of a watercraft lift that complies with Env-Wt	deministration.	fresidential utilities mily home that	Installation of a temporary tier 1 or tier 2 crossing that complies		
513.24(a)(1)a		Env-Wt 521.06(a)(7)	with Env-Wt 903.01(e)(5)		
Installation of a new canopy that					
complies with Env-Wt 513.27(a)					
SECTION 3 - PROJECT LOCATION (Env-					
A separate application must be filed with each municipality that jurisdictional impacts will occur in.					
ADDRESS: NH Route 25		TOWN/	CITY: Meredith		
TAX MAP/LOT NUMBER: Tax Map U07 / Lot N/A					
NAME OF WATER BODY, WETLAND, OR OTHER JURISDICTIONAL AREA: Meredith Bay					
LATITUDE (in decimal degrees to five d	ecimal places):		nal degrees to five decimal places):		
44.65866°	44.65866° -71.49832°				

SECTION 4 - PROJECT DESCRIPTION AND IMPACT AREA (Env-Wt 309.07(c))

Provide a description of the project, including a list of the work items to be performed and detailed dimensions of the size of the impacts in jurisdictional areas. Please identify the type of landform to be affected, including the type of wetland and type of soils.

New Hampshire Department of Transportation (NHDOT) personnel performed an inspection of the red listed NH Route 25 Bridge over Hawkins Brook in Meredith, NH (NHDOT Bridge No. 189/150) on November 15, 2019. The results of the inspection revealed the southwest wingwall has spalled and there is exposed rebar with undermining at the base of both wingwalls. The proposed repair work will address these portions of the bridge to keep it in service until a larger project can be planned.

The proposed repairs include replacement of rip rap in front of the wingwalls where undermining has occurred. The stream will be diverted around the work area by installing a cofferdam, the work zone area will be dewatered, and the water will be pumped to dewatering basins that will have a minimum of 20-foot vegetative buffer to any wetland or waterbody. This operation will not cause a violation to any water quality standard. Concrete repairs will be performed within the same footprint of the existing wing by placing a wood frame around the wing and filling it with concrete to fill in the spalled areas and cover the exposed rebar. Upon completion of the repair work all dewatering devices will be removed and the site will be restored to its original condition. All work, including site access, will be performed within the NHDOT ROW.

As shown in the photos attached, per Env-Wt 309.06(a)(19), the proposed repair will replace riprap where riprap was installed during previous stabilization efforts and will not include placement of new structural components (riprap) in locations where none existed previously. Work will be limited to stabilization of the wingwalls and will not extend lakeward more than 2 feet from the extent of prior work done for installation and stabilization of the structure. Work has been limited such that it will not extend past the Natural Mean High Water elevation of 504.32 posted in the NHDES Official List of Public Waters, and will not result in fill that will create land in public waters.

A construction sequence is attached to the PBN.

There will be 207 square feet of permanent and 352 temporary impacts for a total of 559 square feet of impacts as a result of the repair project.

IMPACT AREAS: Please fill out the table below, indicating square feet (SF) and/or linear feet (LF) of impacts, as applicable. Temporary impacts are impacts not intended to remain (and will be fully restored to pre-construction conditions) after the project is completed.

NOTE: For new seasonal dock projects, please enter the square footage of the proposed dock in the permanent impact column of the applicable resource.

Jurisdictional Area	Permanent (SF/LF)	Temporary (SF/LF)	Jurisdictional Area	Permanent (SF/LF)	Temporary (SF/LF)
Forested Wetland			Lake	204 SF / 67 LF	318 SF / 67 LF
Emergent Wetland			Pond		
Wet Meadow			Tidal Water	/	/
Intermittent Stream/ Ephemeral Stream	/		Previously- developed Upland in Tidal Buffer Zone		
Perennial Stream / River			Other (Bank)	3 SF / 5 LF	34 SF / 12 LF

NHDES-W-06-027 SECTION 5 - MINIMUM IMPACT PROJECT PROVISION (Env-Wt 309.07(c)(1)) Please identify the applicable minimum project provision in Env-Wt 500, Env-Wt 600, or Env-Wt 900, as applicable. and any required project-specific information. In lieu of a narrative for this section, the applicant may submit the applicable Project Specific Checklist. MINIMUM IMPACT PROJECT PROVISION: See attached checklist. SECTION 6 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 309.07(a)) If the applicant is a trust or a company, then the name of the trust or company should be written as the applicant's name. NAME: NHDOT Bridge Maintenance, Tim Boodey, PE MAILING ADDRESS: 7 Hazen Drive / P.O. Box 483 TOWN/CITY: Concord STATE: NH ZIP CODE: 03302 DAYTIME PHONE: 603-271-3734 EMAIL ADDRESS: Tim.Boodey@dot.nh.gov SECTION 7 - NATURAL HERITAGE BUREAU (Env-Wt 309.07(b)(6)) Include the results and identification number of the investigations required by Env-Wt 306.05. Questions related to completing the DataCheck should be directed to the Natural Heritage Bureau (NHB). Natural Heritage Bureau Identification Number: NHB 20 - 0924 Attach the results **and** identification number of the **DataCheck query**. SECTION 8 - CONDITIONS FOR PBNs (Env-Wt 309.09) Please check each box below to acknowledge that the project meets the following conditions: All work authorized by a PBN shall comply with all applicable conditions specified in Env-Wt 307 and the X applicable provisions of Env-Wt 500, Env-Wt 600, or Env-Wt 900. Subject to Env-Wt 309.10, after the completion of work authorized by a PBN no other work that would require any permit or other authorization under RSA 482-A or subtitle Env-Wt shall be undertaken on the X subject property pursuant to another PBN or EXP, or pursuant to an SPN, for a period of 12 months from the date the PBN was issued. Within 10 days following completion of the work covered by a PBN, the person responsible for the project \boxtimes shall submit to the department confirmation of completion of the project, either on paper or electronically.

SECTION 9 - REQUIRED CERTIFICATIONS (Env-Wt 309.07(d))

Initial each box below and sign the application to certify that:

	The proposed project meets the conditions and limits of Env-Wt 307 and the applicable minimum impact project rule.
Initials:	If the project is to repair or replace a docking structure, the docking structure is an existing legal structure.

Initials:	···· ···					
Initials:	The applicant is aware of the limits of the PBN and understands and will comply with all conditions in the PBN and all applicable conditions in Env-Wt 307.					
Initials:	To the best of the signer's knowledge and	belief, all required notifications have been pro	vided.			
Initials:	The information submitted on or with the the signer's knowledge and belief	application is true, complete, and not mislead	ing to the best of			
Initials:	 The signer understands that: The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: Deny the application. Revoke any approval that is granted based on the information. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. The signature shall constitute authorization for the municipal conservation commission and the department to inspect the site of the proposed project, except for minimum impact trail projects, where the signature shall authorize only the department to inspect the site pursuant to RSA 482-A:6, II. 					
Initials:	by the signer that he or she is aware of the	perty, each property owner signature shall cons application being filed and does not object to t				
	10 - REQUIRED SIGNATURE (Env-Wt 309.0	The state of the s				
SIGNATU 5	RE (OWNER):	PRINT NAME LEGIBLY: STEVE W JOHNSON	DATE: 8/27/2020			
SIGNATU OWNER):	RE (APPÉICANT, IF DIFFERENT FROM	PRINT NAME LEGIBLY:	DATE:			
SIGNATU	RE (AGENT, IF APPLICABLE):	PRINT NAME LEGIBLY: Kimberly R. Peace	DATE: August 24, 2020			
SECTION 11 - CONSERVATION COMMISSION SIGNATURE (Env-Wt 306.02(c); Env-Wt 309.07(h); Env-Wt 309.08(d)) With the exception of the project types specified in Env-Wt 309.07(h), the Conservation Commission signature is necessary for NHDES to process this PBN within 10 days of receipt of an administratively complete application. If the Conservation Commission does not sign this statement for any reason where it is necessary, NHDES will process this PBN within 25 days of receipt of an administratively complete application. The signature below certifies that the municipal Conservation Commission or, if there is no conservation commission, the local governing body, has reviewed this application and waives its right to intervene per RSA 482-A:11. AUTHORIZED COMMISSION SIGNATURE: PRINT NAME LEGIBLY: DATE:						
AOTHOR	ZED COMMISSION SIGNATURE.	TAMET WAINE LEGIDET.	DAIL.			

SECTION 12 - LOCAL RIVER MANAGEMENT ADVISO 309.07(i); Env-Wt 309.08(d))	PRY COMMITTEE (LAC) SIGNATURI	E (Env-Wt 306.02(d); Env-Wt					
If a PBN is sought for a routine roadway maintenance project that is within LAC jurisdiction and the application has not been signed by a legal representative of the LAC to indicate the right to intervene has been waived by the applicable LAC, NHDES will process this PBN within 25 days of receipt of an administratively complete application.							
The signature below certifies that the LAC waives it	·						
(N/A This project is <i>not</i> within a Designated Ri		AC jurisdiction)					
AUTHORIZED LAC REPRESENTATIVE SIGNATURE:	PRINT NAME LEGIBLY:	DATE:					
SECTION 13 - COUNTY CONSERVATION DISTRICT O (Env-Wt 309.07(g))	R CERTIFIED WETLAND SCIENTIST	SIGNATURE					
ONLY for agriculture PBN projects under Env-Wt 52 conservation district or certified wetland scientist (0 522.06(a)(2)).							
By signing below, the county conservation district o of that rule.	r certified wetland scientist certific	es compliance with all conditions					
AUTHORIZED COUNTY CONSERVATION DISTRICT	PRINT NAME LEGIBLY:	DATE:					
OR CWS SIGNATURE:	Not applicable						
SECTION 14 - TOWN / CITY CLERK (RSA 482-A:3, I; I	Env-Wt 309.07(f))						
As required by RSA 482-A:3, I(a)(1), I hereby certify including all attachments with the town/city indicate		pies of the application					
TOWN/CITY CLERK SIGNATURE:	PRINT NAME LEGIBLY:						
TOWN/CITY CLERK SIGNATURE.	Please refer to RSA 482-A:3I(a)(1):						
	The four (4) town copies have been sent via certified mail						
	and filed directly with the town above regulation.	n in accordance with the					
TOWN/CITY:		DATE:					

DIRECTIONS FOR TOWN/CITY CLERK (RSA 482-A:3,I,(a),(1)):

- 1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
- 2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
- 3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board. And
- 4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.



REPAIR OF AN EXISTING LEGAL TIER 3 STREAM CROSSING PERMIT-BY-NOTIFICATION CHECKLIST



Water Division/Land Resources Management Wetlands Bureau

Check the Status of your Notification

RSA/Rule: RSA 482-A/ Env-Wt 900

This checklist summarizes the criteria and requirements for a Permit-by-Notification (PBN) for repair of a legally existing tier 3 stream crossing that complies with Env-Wt 903.01(e)(3). In addition to the project-specific criteria and requirements listed on this checklist, all PBNs must meet the criteria and requirements listed on the <u>PBN form (NHDES-W-06-027)</u> and perform the required planning for all projects as described in Env-Wt 306.05.

SECTION 1 - EXEMPTION FROM Env-Wt 903 AND Env-Wt 904 (Env-Wt 901.03)

The following activities and crossings are exempt from Env-Wt 903 and Env-Wt 904, provided they are conducted in accordance with all applicable conditions:

- (a) Minimum impact routine roadway maintenance activities conducted in accordance with Env-Wt 308.04 or Env-Wt 309.03.
- (b) Minimum impact projects to allow vehicular access to a piece of property for forest management activities, conducted in accordance with Env-Wt 520.
- (c) Minimum impact agricultural activities conducted in accordance with Env-Wt 522.
- (d) Minimum impact trail activities conducted in accordance with Env-Wt 517.
- (e) Temporary crossings, so long as the area in which the crossing was placed is restored to pre-installation conditions when the crossing is removed.

If your project meets one of these exemptions, it does not qualify for this PBN. Instead, please seek a <u>Routine</u> Roadway Maintenance Registration or a Statutory Permit-By-Notification, as applicable.

SECTION 2 - TIER 3 STREAM CROSSING IDENTIFICATION (Env-Wt 904.05)

- Your project must be for the repair of an existing, legal tier 3 stream crossing and thus, the crossing must meet the criteria for a tier 3 stream crossing. A tier 3 stream crossing shall be a crossing:
 - Not located on a tidal watercourse, and:
 - Located on a watercourse where the contributing watershed is 640 acres or greater.
 - Located within a designated river corridor, unless:
 - The crossing would be a tier 1 stream based on contributing watershed size, or
 - The structure does not create a direct surface water connection to the designated river as depicted on the national hydrography dataset as found on GRANIT.
 - o Located within a 100-year flood plain.
 - Located in a jurisdictional area having any protected species or habitat. Or
 - Located in a prime wetlands or within a duly-established 100-foot buffer, unless a waiver has been granted pursuant to RSA 482-A:11, IV(b) and Env-Wt 706.

Irm@des.nh.gov or (603) 271-2147
NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095
www.des.nh.gov

SECTION 3 - MINIMUM IMPACT PROJECT CRITERIA (Env-Wt 309.06(a)(20); Env-Wt 903.01(e))

Only one stream crossing is included in the project.

To qualify for this PBN, the project must meet the following criteria:

- The repair is limited to existing legal crossings where the tier classification is based only on the size of the contributing watershed.
- The crossing is not part of a larger crossing that meets the criteria for a major project specified in Env-Wt 400. regardless of the tier classification of the stream crossing that is part of the project.
- The project does not need one or more waivers.
- The project is not a for a temporary tier 3 stream crossing.
- A professional engineer certifies, and provides supporting analyses, to show the following:
 - The existing crossing does not have a history of causing or contributing to flooding that damages the crossing or other human infrastructure or protected species habitat, and
 - The proposed stream crossing will:
 - a) Meet the general criteria specified in Env-Wt 904.01,
 - b) Maintain or enhance the hydraulic capacity of the stream crossing,
 - Maintain or enhance the capacity of the crossing to accommodate aquatic organism passage.
 - d) Maintain or enhance the connectivity of the stream reaches upstream or downstream of the crossing, and
 - e) Not cause or contribute to the increase in the frequency of flooding or overtopping of the banks upstream or downstream of the crossing.

Please note that "repair" as applied to a stream crossing means work on an existing legal structure to allow the structure to remain in place where the necessary work does not include the installation of new structural components (Env-Wt 902.24). It is different from "rehabilitation" (Env-Wt 902.23) and "replacement" (Env-Wt 902.26).

SECTION 4 - CONDITIONS APPLICABLE TO ALL STREAM CROSSING WORK (Env-Wt 904.02)

- All stream crossing work are subject to all applicable conditions in Env-Wt 307.
- In stream work must be done only during low flow conditions.
- Work on stream crossings that requires any work in areas that are subject to flowing water must maintain normal flows and prevent water quality degradation during the work by using best management practices, such as temporary by-pass pipes, culverts, or cofferdams.

SECTION 5 - GENERAL DESIGN CONSIDERATIONS (Env-Wt 904.01)

All stream crossings shall be designed and constructed so as to:

- Not be a barrier to sediment transport.
- Not restrict high flows and maintain existing low flows.
- Not obstruct or otherwise substantially disrupt the movement of aquatic organisms indigenous to the water body beyond the actual duration of construction.
- Not cause an increase in the frequency of flooding or overtopping of banks.
- Maintain or enhance geomorphic compatibility by:

	•	Minimizing the potential for inlet obstruction by sediment, wood, or debris, and
	•	Preserving the natural alignment of the stream channel.
\boxtimes	Pre	serve watercourse connectivity where it currently exists.
	Res	tore watercourse connectivity where: N/A
	•	Connectivity previously was disrupted as a result of human activity(ies), and
	\bullet_{i}	Restoration of connectivity will benefit aquatic organisms upstream or downstream of the crossing, or both.
\boxtimes	Not	cause erosion, aggradation, or scouring upstream or downstream of the crossing.
\boxtimes	Not	cause water quality degradation.

SECTION 6 - INFORMATION REQUIRED FOR A STREAM CROSSING (Env-Wt 903.03; Env-Wt 904.04(e))

In addition to the information required on the PBN form (NHDES-W-06-027), please provide:

- A US Geological Survey map or updated elevation data based on LiDAR on which the following are clearly delineated or otherwise noted:
 - The approximate boundaries of the contributing watershed,
 - The size of the contributing watershed, and
 - Identification of the stream tier based on watershed size.
- Plans that show the following:
 - The scale of the plan and a north arrow,
 - The extent of disturbance,
 - Road locations, including road edges, centerline, and boundaries of the right-of-way,
 - Proposed channel work including bank erosion control features, grade control, and channel linings, and
 - All dimensions of the proposed structure and of the existing structure, if any, including inlet and outlet invert elevations.
- The hydraulic capacity of the proposed crossing, in terms of flood frequency event, and of the existing crossing, if any. See included supplement
- The type of crossing, such as a culvert or span, that is proposed and that exists, if any.
- The following information about the dewatering system proposed to be used: See included supplement
 - Estimated maximum flow anticipated during construction,
 - The location, height, and width of the diversion dam,
 - The location and capacity of each sump, and
 - Backwater prevention method.
- The following information about erosion and pollution controls: See included supplement
 - The sediment treatment plan, including methods, release point(s), and extent,
 - Any additional methods proposed to control erosion, and
 - All methods of preventing and controlling releases from pumps, fuel stations, and equipment storage.

Supplemental Information per Env-Wt 903.03 (c) (e) and (f)- Meredith 189/150

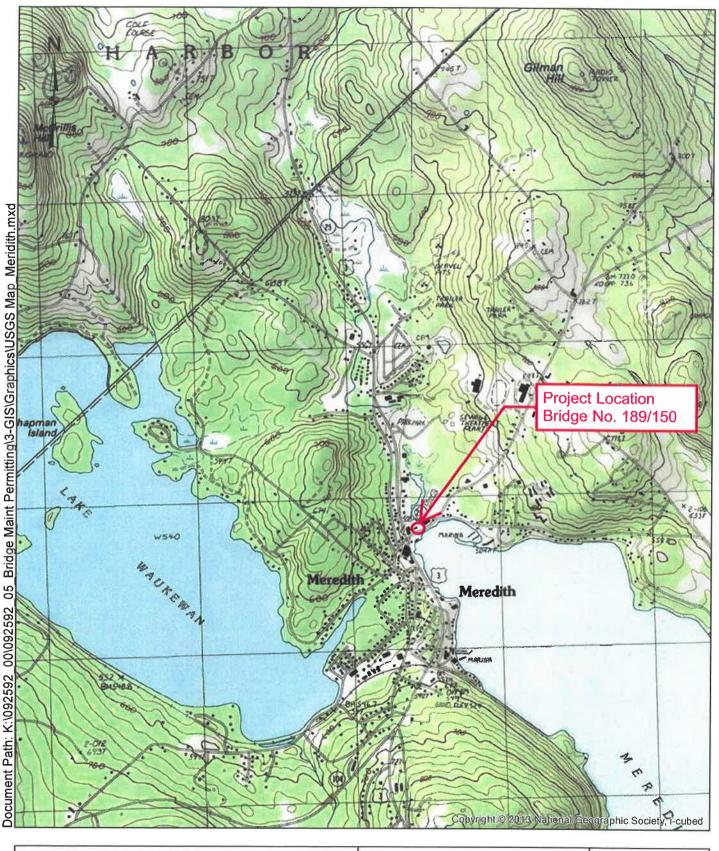
(c) There is not a history of flooding or damage associated with this crossing. The proposed work will not change the hydraulic capacity of the crossing. In particular, the reconstruction of the downstream wings in kind and reestablishment of previously placed rip rap will help keep this crossing in place and prevent potential erosion from storm events affecting the Lake. The level of the lake dictates the elevation and flow through the structure and this was reviewed as we developed the erosion control plan for the proposed work. Due to the limited impact of the proposed work we are not providing a full analysis.

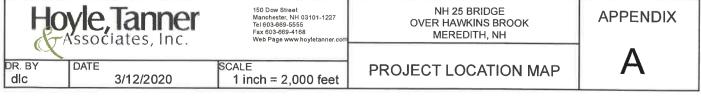
(e) Dewatering system:

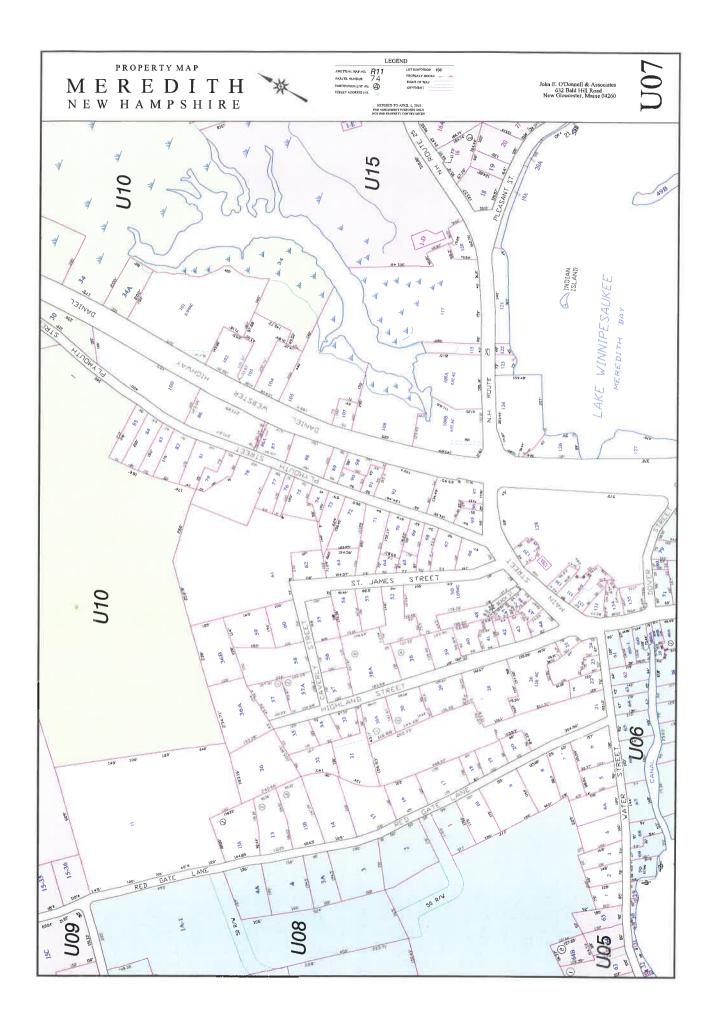
- Estimated maximum flow anticipated during construction: DOT estimates the maximum flow during construction of 85 CFS
- The location, height, and width of the diversion dam: As shown on the plans, the work areas are
 confined to in front of and around the downstream concrete wings. Two silt booms will be
 utilized around each wing. Water will flow through the bridge as occurs now. Complete
 dewatering of the work area is not anticipated. Concrete work will be confined to within
 concrete forms inside the silt booms. It is anticipated there will be four feet of water in the area
 during the work.
- The location and capacity of each sump: There are no planned sumps. Any pumping that takes
 place will be within the silt fence during some construction activities. Pumps will be discharged
 into a water tank that will be taken off site to be emptied outside of jurisdictional wetlands.
- Backwater prevention method: The work area will not be dewatered completely; no backwatering is expected.

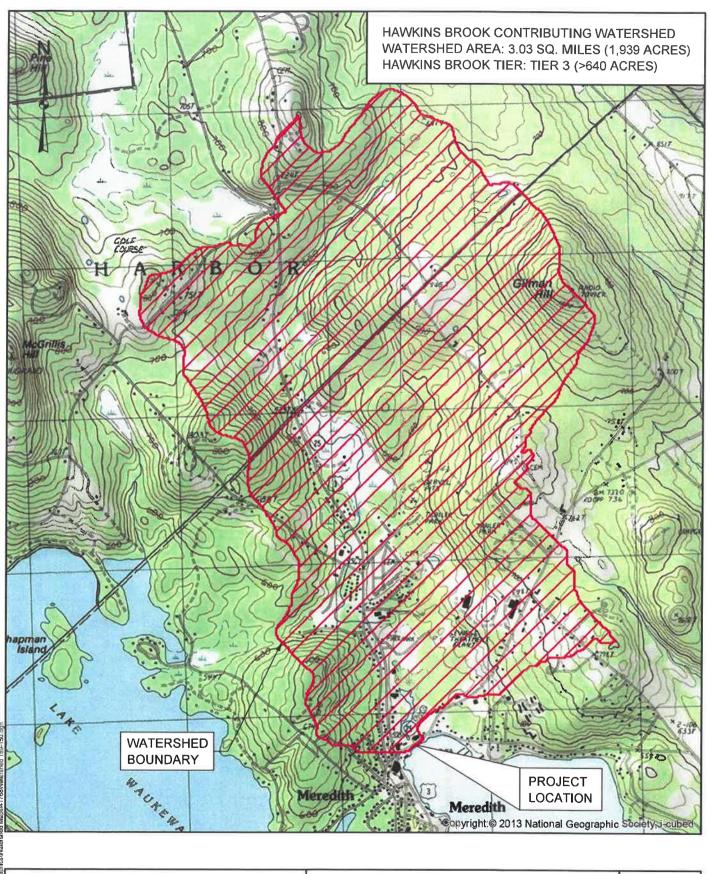
(f) Erosion and pollution controls:

- The sediment treatment plan, including methods, release point(s), and extent: Pumped water will be discharged into a water tank and taken off site.
- Any additional methods proposed to control erosion: Natural buffer/perimeter controls will be installed in the area of the Top of Bank. Disturbed vegetated areas will be stabilized for vegetation growth.











DATE AUGUST 2020 150 Dow Street, Manchester, NH 03101-1227 Tel (603) 669-5555 Fax (603) 669-4168 www.hoyletanner.com

> SCALE 1" = 2,000'

NH 25 BRIDGE OVER HAWKINS BROOK MEREDITH, NH

PROJECT LOCATION MAP

APPENDIX



FIGURE 1 OF 1

8/27/2020 StreamStats

StreamStats Report for NH Route 25, Meredith

Region ID:

Workspace ID: NH20200827134019640000

Clicked Point (Latitude, Longitude): 43.65881, -71.49851

2020-08-27 09:40:35 -0400



 $\label{thm:prop:sing} Drainage\ Area\ verified\ via\ NH\ Stream\ Crossing\ Initiative\ Website\ https://www.arcgis.com/apps/webappviewer/index.html?$ id=72dd57d3274e4d64abb5136a0a678db7 and is listed as 3.03 sq. mi.

Basin Characteristics

Parameter			
Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.03	square miles
CONIF	Percentage of land surface covered by coniferous forest	20.0894	percent
PREBC0103	Mean annual precipitation of basin centroid for January 1 to March 15 winter period	6.93	inches
BSLDEM30M	Mean basin slope computed from 30 m DEM	9.006	percent
MIXFOR	Percentage of land area covered by mixed deciduous and coniferous forest	24.8539	percent
PREG_03_05	Mean precipitation at gaging station location for March 16 to May 31 spring period	8.4	inches
TEMP	Mean Annual Temperature	43.758	degrees F
TEMP_06_10	Basinwide average temperature for June to October summer period	60.486	degrees F
PREG_06_10	Mean precipitation at gaging station location for June to October summer period	17.2	inches
ELEVMAX	Maximum basin elevation	1041.196	feet

Seasonal Flow Statistics Parameters[Low Flow Statewide]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	3.03	square miles	3.26	689
CONIF	Percent Coniferous Forest	20.0894	percent	3.07	56.2
PREBC0103	Jan to Mar Basin Centroid Precip	6.93	inches	5.79	15.1
BSLDEM30M	Mean Basin Slope from 30m DEM	9.006	percent	3.19	38.1
MIXFOR	Percent Mixed Forest	24.8539	percent	6.21	46.1
PREG_03_05	Mar to May Gage Precipitation	8.4	inches	6.83	11.5
TEMP	Mean Annual Temperature	43.758	degrees F	36	48.7
TEMP_06_10	Jun to Oct Mean Basinwide Temp	60.486	degrees F	52.9	64.4

8/27/2020 StreamStats

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
PREG_06_10	Jun to Oct Gage Precipitation	17.2	inches	16.5	23.1
ELEVMAX	Maximum Basin Elevation	1041.196	feet	260	6290

Seasonal Flow Statistics Disclaimers[Low Flow Statewide]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Seasonal Flow Statistics Flow Report[Low Flow Statewide]

Value	Unit
1.72	ft^3/s
1.44	ft^3/s
1.25	ft^3/s
0.944	ft^3/s
0.749	ft^3/s
0.62	ft^3/s
1.26	ft^3/s
0.685	ft^3/s
6.14	ft^3/s
4.86	ft^3/s
3.76	ft^3/s
2.71	ft^3/s
2.04	ft^3/s
1.46	ft^3/s
1.87	ft^3/s
1	ft^3/s
0.371	ft^3/s
0.268	ft^3/s
0.2	ft^3/s
0.124	ft^3/s
0.0828	ft^3/s
0.0711	ft^3/s
0.14	ft^3/s
0.0456	ft^3/s
2.59	ft^3/s
1.91	ft^3/s
1.38	ft^3/s
0.86	ft^3/s
0.543	ft^3/s
0.324	ft^3/s
1.37	ft^3/s
0.507	ft^3/s
	1.72 1.44 1.25 0.944 0.749 0.62 1.26 0.685 6.14 4.86 3.76 2.71 2.04 1.46 1.87 1 0.371 0.268 0.2 0.124 0.0828 0.0711 0.14 0.0456 2.59 1.91 1.38 0.86 0.543 0.324 1.37

Seasonal Flow Statistics Citations

Flynn, R.H. and Tasker, G.D.,2002, Development of Regression Equations to Estimate Flow Durations and Low-Flow-Frequency Statistics in New Hampshire Streams: U.S.Geological Survey Scientific Investigations Report 02-4298, 66 p. (http://pubs.water.usgs.gov/wrir02-4298)

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8/27/2020 StreamStats

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Application Version: 4.4.0

https://streamstats.usgs.gov/ss/

To: Deb Coon

150 Dow Street

Manchester, NH 03101

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 3/31/2020

NHB File ID: NHB20-0924 Applicant: NHDOT

Location: Tax Map(s)/Lot(s):

Meredith

Project Description: Repairs to the NH Route 25 Bridge Over Swamp Outlet,

Meredith, NH

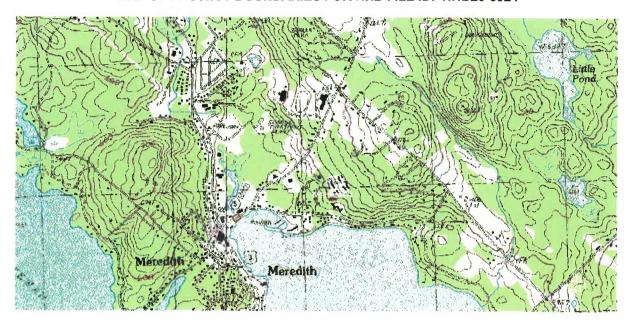
The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 3/30/2021.

Date: 3/31/2020

MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB20-0924



Coon, Deb

From:

Peace, Kimberly R.

Sent:

Friday, April 24, 2020 12:48 PM

To:

Coon, Deb; James, Sean T.; 092592.05 - NHDOT Statewide Env #41768 Bridge Maint Permitting

Subject:

FW: Repairs to NH Route 25 bridge over Hawkins Brk- NHDOT # 42828

Attachments:

1 OF 3 4-24-20.JPG; 2 OF 3 4-24-20.JPG; 3 OF 3 4-24-20.JPG; Meredith Map for 2020 Herbicide

Bids.pdf

See attached and below.

Kimberly R. Peace

Senior Environmental Coordinator

Hoyle, Tanner & Associates, Inc. (603) 669-5555, ext 151 | Cell: (603) 716-3343

From: John Edgar < jedgar@meredithnh.org>

Sent: Friday, April 24, 2020 12:05 PM

To: Peace, Kimberly R. <kpeace@hoyletanner.com>

Cc: Angela LaBrecque <alabrecque@meredithnh.org>; Phillip L. Warren <pwarren@meredithnh.org>

Subject: RE: Repairs to NH Route 25 bridge over Hawkins Brk- NHDOT # 42828

Hi Kimberly,

Thank you for your time this morning to discuss the DOT project.

I just spoke with the Conservation Commission and they are in agreement with the substance of my comments to you earlier this AM and do not plan to communicate separately.

- o Hawkins Brook is not a designated Prime Wetland
- o The Town does <u>not</u> have a formal list of preferred/priority mitigation sites in the event NHDES mitigation is required
- o If mitigation in some form is required, and you are interested in the nearby nature trail/boardwalk project at Hawkins Brook currently under construction, please contact Angela LaBrecque, Town Planner at alabrecque@meredithnh.org for more information
- There is milfoil in Meredith Bay where the bridge/box culvert outlets into Meredith Bay. SEE ATTACHED MILFOIL TREATMENT BID MAP PREPARED BY NHDES
- The box culvert is surrounded by Scenic Park which is owned by the Town. A heavily used, paved pedestrian pathway runs through Scenic park and generally perpendicular to the box culvert (safety plan?). SEE ATTACHED PHOTOS
- Scenic Park includes and irrigation system. I believe the "lighthouse" near the outlet is an irrigation pump house (which also suggests there is UG electricity in the area. SEE ATTACHED PHOTOS
- Careful consideration should be given to how and where de-watering will occur, if de-watering is necessary
- Consideration should be given to off-peak construction to minimize traffic and pedestrian impacts
- You've indicated that the project will likely occur during low flow conditions, possibly in the fall
- o You've indicated that the Town will be able to review and comment on the wetlands permit application
- Please contact Phil Warren, Town Manager re: Scenic Park at <u>pwarren@meredithnh.org</u> (i.e. permission to use, temporary construction easements, park restoration, irrigation system, pedestrian safety, etc.)

Thanks you.

John C. Edgar, Community Development Director

Town of Meredith, NH 03253

Direct: 603 677-4217 jedgar@meredithnh.org

From: John Edgar

Sent: Friday, April 24, 2020 10:05 AM

To: 'kpeace@hoyletanner.com' <kpeace@hoyletanner.com>

Subject: Repairs to NH Route 25 bridge over Hawkins Brk- NHDOT # 42828

Good morning Kimberly,

I am in receipt of your letter to the Conservation Commission dated April 22, 2020. I have a couple of questions. Would you be able to give me a call at 677-4217 for a brief conversation? Thank you.

John C. Edgar, Community Development Director

Town of Meredith, NH 03253

Direct: 603 677-4217 jedgar@meredithnh.org

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CONSTRUCTION SEQUENCE

- 1. Install erosion control measures.
- 2. At normal to low flow, the stream will be diverted around the wok area the by installing a cofferdam.
- The work zone area of the wing will be dewatered. Water from this operation will be pumped to dewatering basins which will have a minimum of 20-foot vegetative buffer to any wetland or waterbody. This operation will not cause a violation to any water quality standard or impact any wetland or stream.
- 4. Concrete will be replaced within the same footprint of the existing wing.
- 5. Riprap will be placed in front of the wing walls.
- 6. All dewatering devices will be removed and the site will be restored to its original condition.

<u>Note</u>: The Project will utilize BMP's from the Best Management Practices manual during all phases of construction. Work will not occur during periods of time when storms and rain events are anticipated.

